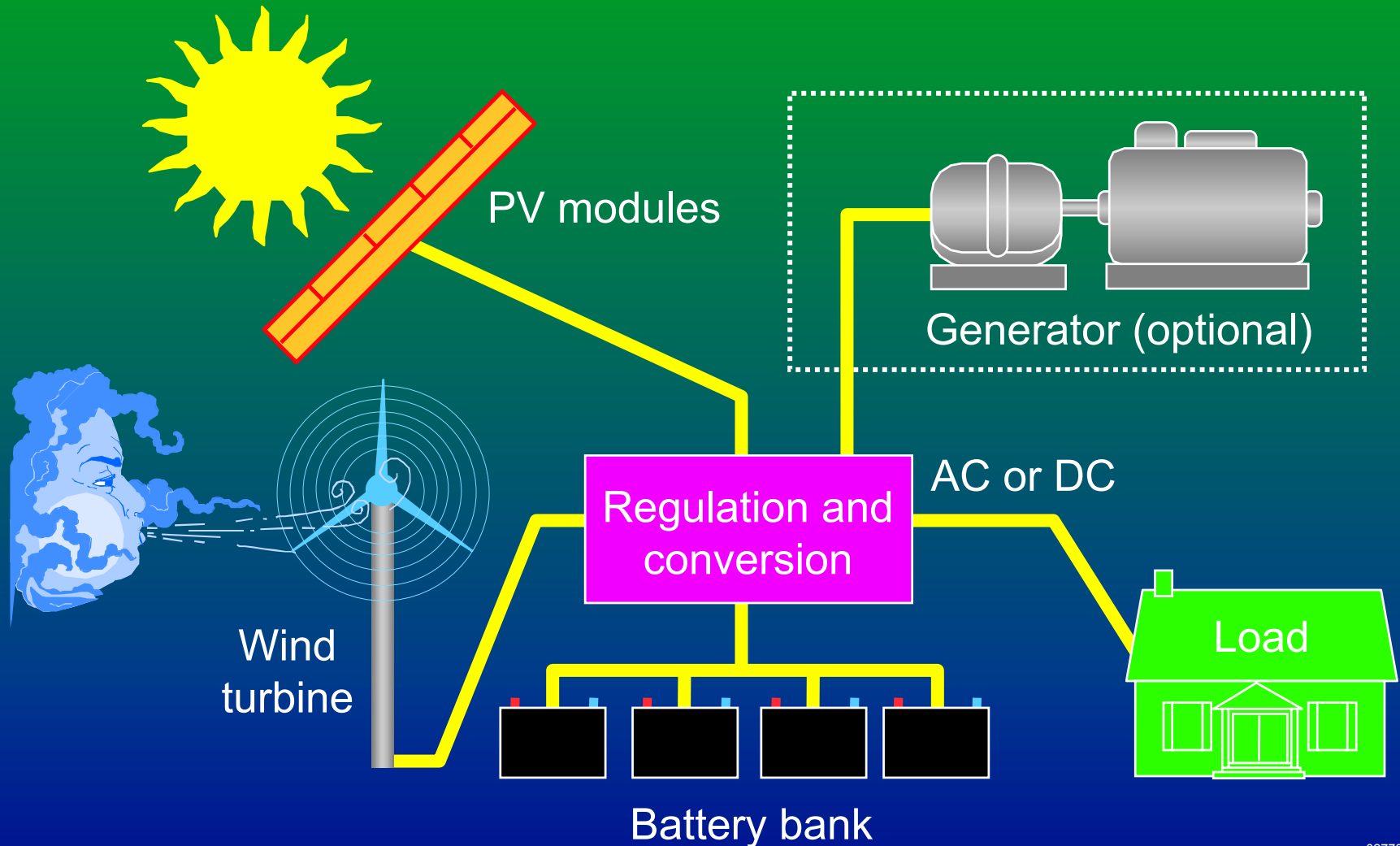
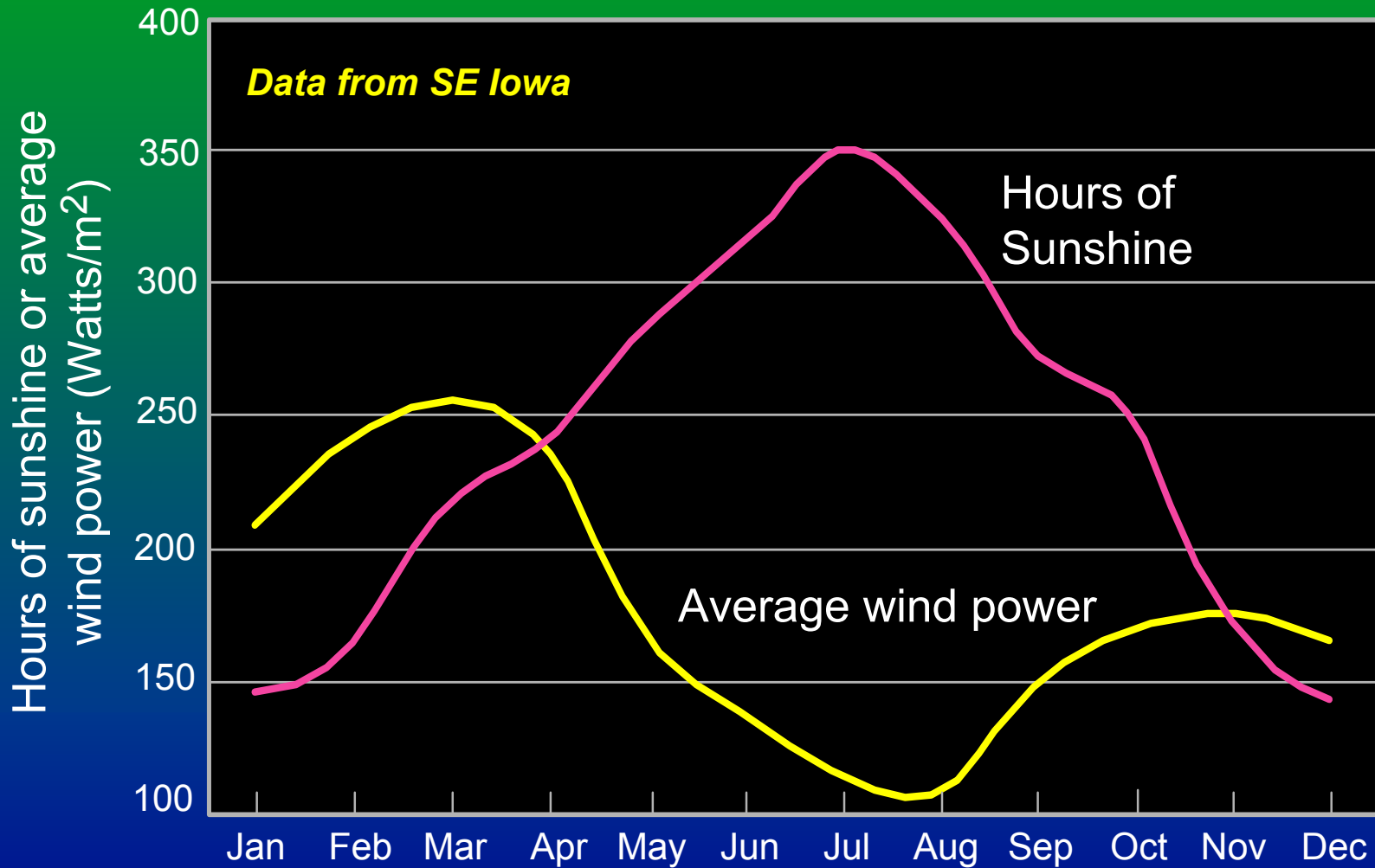


# Hybrid Power Systems

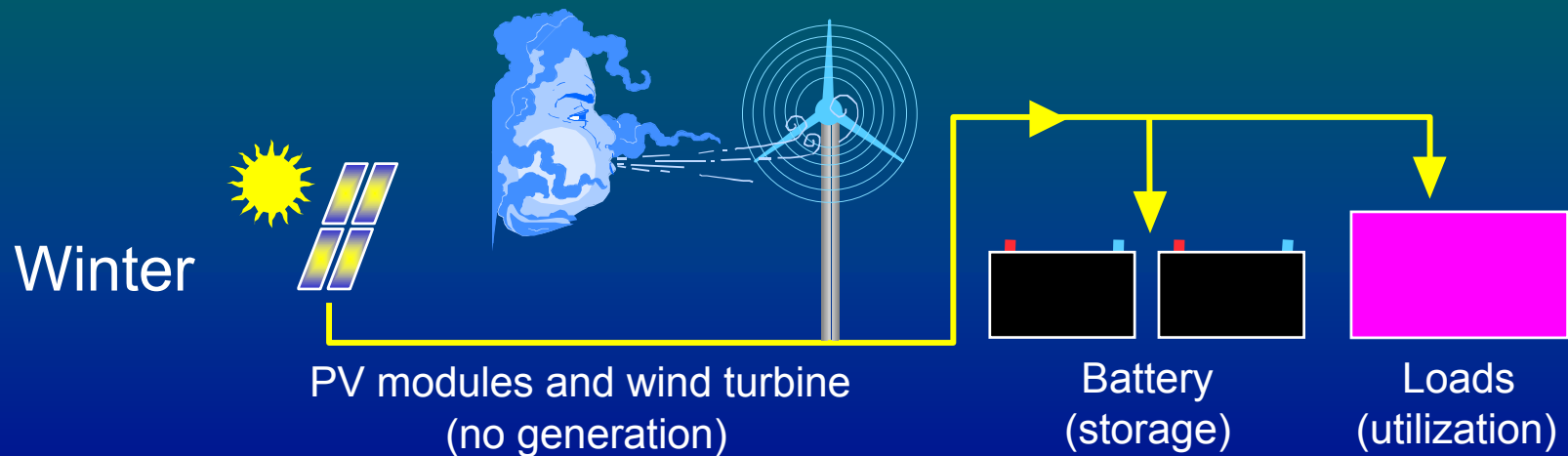
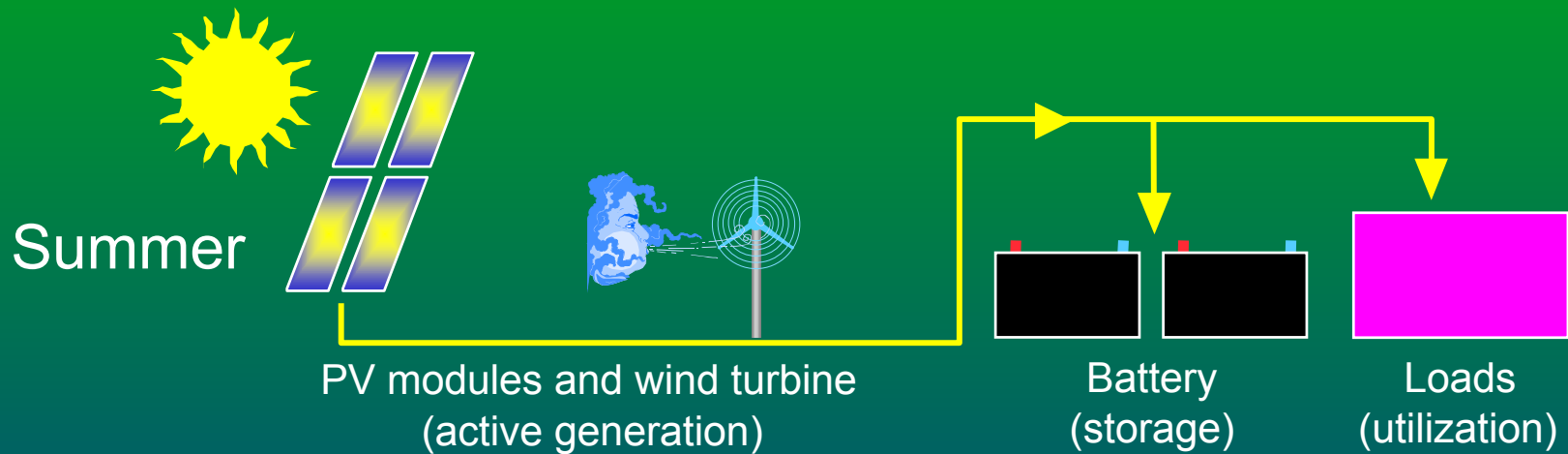
Combine multiple sources to deliver reliable electric power



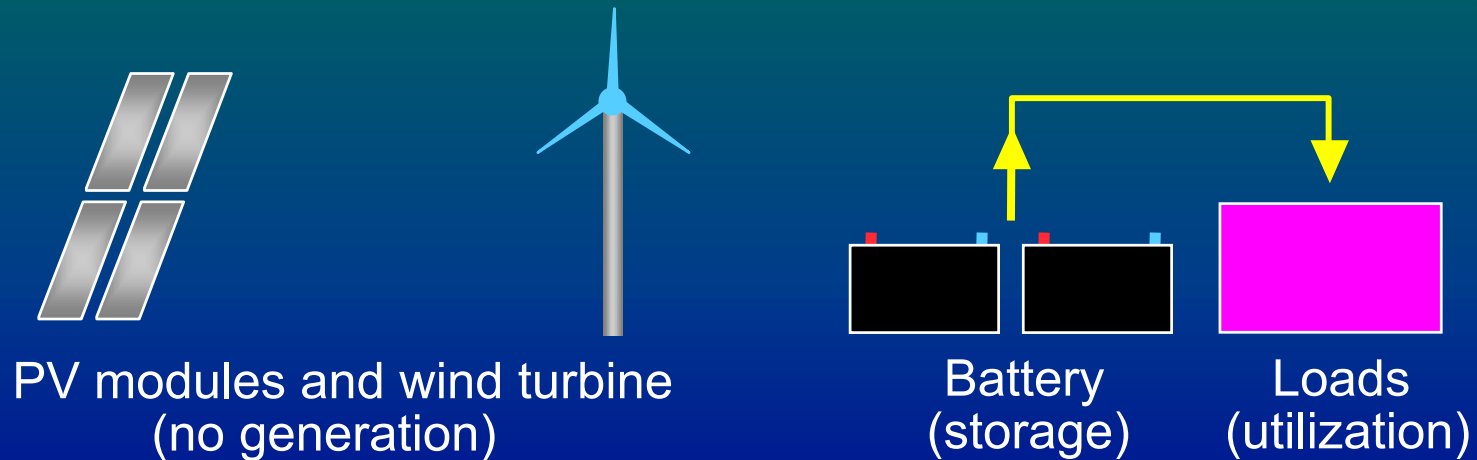
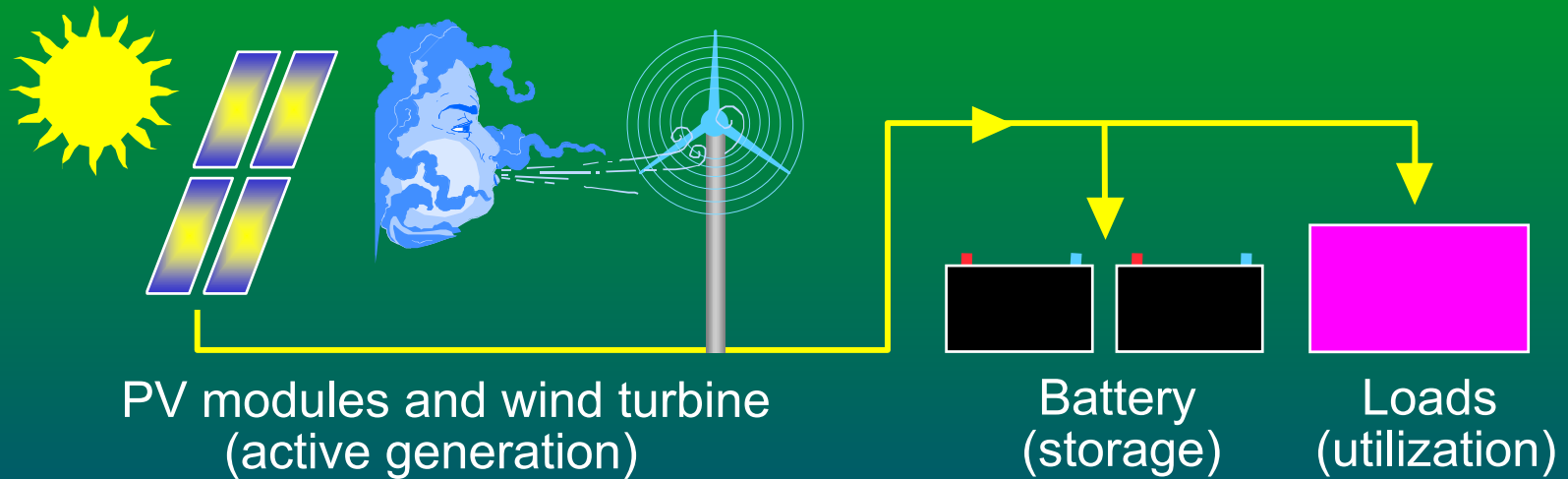
# Solar and Wind Resources are Complimentary



# The Effect of Seasons on Hybrid Power Systems



# The Role of Storage in Hybrid Power Systems



# Why Use a Backup Generator?

- Renewable energy sources (wind and PV) and generators have complementary characteristics:

| <u>Characteristic</u>    | <u>Renewable</u> | <u>Generator</u> |
|--------------------------|------------------|------------------|
| Capital cost             | High             | Low              |
| Operating cost           | Low              | High             |
| Maintenance requirements | Low              | High             |
| Available on demand?     | No               | Yes              |

- In combination, they provide a more reliable and cost-effective power system than is possible with either one alone

# Hybrid Power Systems

Combine multiple sources to deliver reliable electric power

